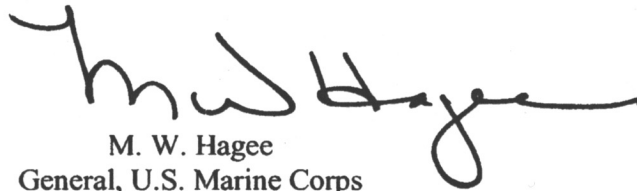


Department of the Navy  
HEADQUARTERS U.S. MARINE CORPS  
Washington, DC

25 April 2005

## A Concept for Distributed Operations

Publication of the concept papers, *Operational Maneuver from the Sea* and *Ship-to-Objective Maneuver* began the process of proposal, debate, and experimentation through which the Marine Corps will address the challenges and opportunities of the future by applying the tenets of maneuver warfare to amphibious operations. As described in *Warfighting*, our philosophy is not merely guidance for action, but also a way of thinking about war. *Distributed Operations* builds upon our philosophy and the themes introduced by the “three-block war.” As we meet the irregular challenges of Small Wars, *A Concept for Distributed Operations* is intended to promote discussion and to generate ideas for specific combat development initiatives...innovation that is squarely focused on our most important weapon—the Marine. *Distributed Operations* describes an operating approach that requires new ways to educate and train our Marines and that guides us in the use of emerging technologies.

A handwritten signature in black ink, appearing to read 'M. W. Hagee', is positioned above the printed name and title.

M. W. Hagee  
General, U.S. Marine Corps  
Commandant of the Marine Corps

# A Concept for Distributed Operations

## INTRODUCTION

Marines fighting the Global War on Terrorism confront adversaries that are adaptive, decentralized, and elusive. Recognizing the overwhelming conventional superiority of U.S. forces, our enemies will continue to develop new tactics designed to exploit perceived seams in our capabilities, or to otherwise undermine our advantages in mobility, firepower, sensing, and command and control. In order to maintain our dominance on the battlefield, it is essential that we continuously adapt our methods of warfighting, while remaining a flexible, combined-arms force.

Accompanying this emerging challenge is a new opportunity. After a quarter century of unwavering commitment to the maneuver warfare philosophy, we are harvesting a generation of junior officers and noncommissioned officers who are fully prepared to assume much greater authority and responsibility than is traditionally expected at the small-unit level. They have proven their critical thinking skills and tactical competence in combat, achieving results that exceed our highest expectations, and demonstrating a capacity for small-unit leadership that will enable us to realize the full promise of maneuver warfare philosophy, through maximum decentralization of informed decisionmaking, guided largely by commander's intent.

## CONCEPT

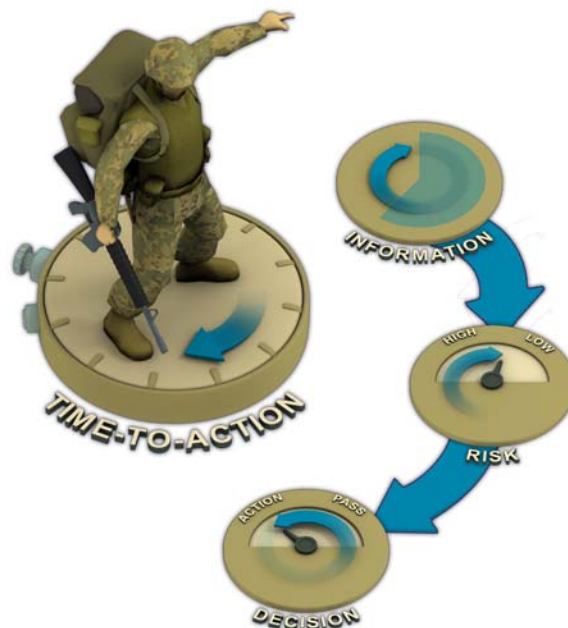
*Distributed Operations* describes an operating approach that will create an advantage over an adversary through the deliberate use of separation and coordinated, interdependent, tactical actions enabled by increased access to functional support, as well as by enhanced combat capabilities at the small-unit level. The essence of this concept lies in the capacity for coordinated action by dispersed units, throughout the breadth and depth of the battlespace, ordered and connected within an operational design focused on a common aim.

*Distributed Operations* constitutes a form of maneuver warfare. Small, highly capable units spread across a large area of operations will provide the spatial advantage commonly sought in maneuver warfare, in that they will be able to sense an expanded



battlespace, and can use close combat or supporting arms, including Joint fires, to disrupt the enemy's access to key terrain and avenues of approach.

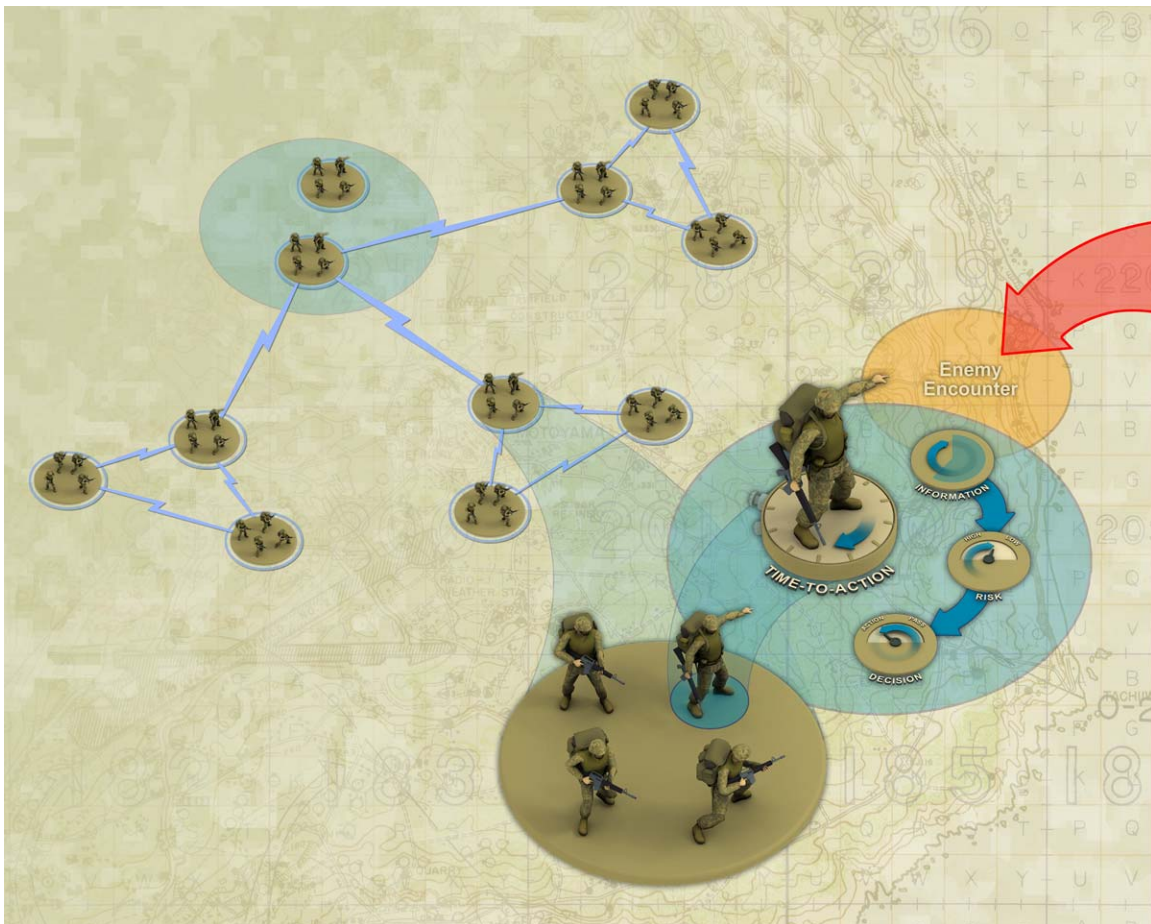
Further, these units will also operate at a temporal advantage. Continuing the trend toward decentralization of authority that has been a hallmark of Marine Corps combat development, this concept posits the distribution of decisionmaking authority across a wide number of junior leaders, who are directly engaged in the fight. By moving authority “downward,” we will dramatically increase the speed of command. This distribution of *authority* among many seasoned and well-trained junior leaders will result in a combination of actions that creates for the enemy a rapidly deteriorating, cascading effect, shattering his cohesion. Units conducting distributed operations will use these advantages to focus on the enemy's critical vulnerabilities, exploiting fleeting opportunities, and thereby achieving tactical successes that will build rapidly to decisive outcomes at the operational level of war.



In the tactical application of the distributed operations concept, it is envisioned that maneuver units will operate in disaggregated fashion, with companies, platoons, and even squads dispersed beyond the normal range of mutually supporting organic direct fires, but linked through a command and control network. All units will be organized, trained, and equipped to facilitate distributed operations, with capabilities beyond those historically resident at the small unit level. They will employ the advantage of extensive dispersion to reduce their vulnerability to enemy observation and fire, but will possess significant combat power, enabling them to locate, close with, and destroy the enemy.

Units will possess the capability to rapidly re-aggregate, in order to exploit fleeting opportunities and to reinforce or support another unit in need. Commanders will decide when and where to use distribution and aggregation based on the tactical situation, the terrain, and the nature of the enemy they are facing. Likewise, commanders may intentionally opt to undercut an adversary's asymmetrical advantage by matching and overwhelming the enemy with force symmetrical to his own. On other occasions, commanders will exploit a symmetrical advantage—usually while operating as a concentrated force. Units must be flexible and dynamic, having the ability to quickly respond to a changing situation, evolving faster than the enemy. The ability to re-aggregate will be enabled by focused and energetic cross training of small units, the creation and use of a more robust communications capability for small units, and an increase in the number of tactical mobility assets available for small units.

Distributed operations capabilities will be additive in nature, providing Marine commanders a new method for tactical deployment and employment. While the concept will drive the development of the enhancements required to render Marine units capable of functioning effectively in a distributed operations scenario, it will not supplant existing capabilities. All Marine units will retain their capacity to operate effectively using the full range of tactical employment methods.



### *The Proliferation of Decisionmakers*

Similarly, distributed operations capabilities will be complementary in character. Units employing these techniques will deploy and fight in coordination with other units using conventional tactics. For example, sea-based forces will project power using ship-to-objective maneuver, with units operating in an aggregated fashion being complemented by other units using distributed operations procedures. Both elements of the sea-based force will operate under a common commander's intent, within the framework of an operational design, and connected by the extended, sea-based network.



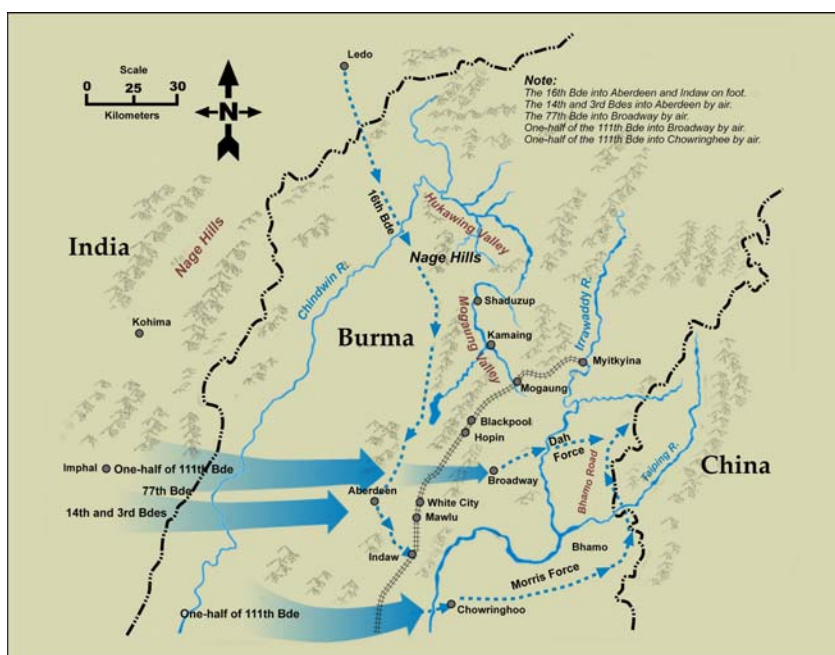
Thus, as an additive and complementary capability, the distributed operations approach will provide Marine commanders the advantage of surprise, by enabling our forces to modify their tactical “shape,” rapidly and unpredictably. Armed with the means to employ a range of tactics—concentrated or distributed—Marines will impose asymmetric challenges and crippling uncertainty upon their adversaries.

## DISTRIBUTED OPERATIONS IN HISTORY

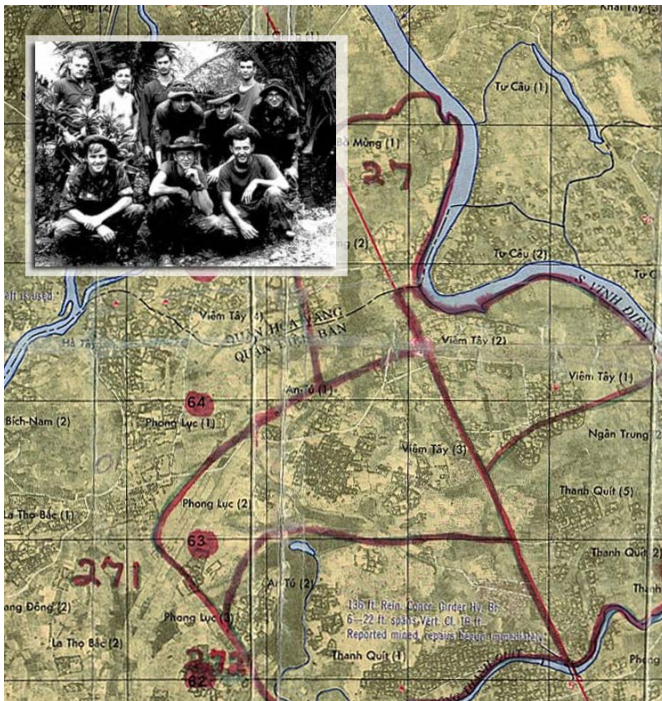
During the twentieth century, the military forces of many nations, in many conflicts, have attempted to develop the idea of purposeful separation to influence a vast area of operations. Their experiences provide useful insights that will serve to inform our approach to the development of distributed operations capabilities. The following examples illuminate some principles common to distributed operations scenarios.

In their 1939-1940 winter war against the Soviet Union, the Finns successfully employed widely distributed forces against less mobile Soviet columns, inflicting disproportionate casualties upon a numerically superior foe. The Finns used an operational design that relied on independent actions and a mobility advantage to generate a string of tactical level successes. In some engagements, the small units of the Finnish Army fought semi-autonomously, but were guided by a common understanding of the operational aim. The superb individual proficiency of the Finnish soldiers and their junior leaders served as a force multiplier that raised the combat power of their forces well beyond that represented by mere numbers of personnel and quantities of equipment.

During the Second World War, in the China-Burma-India Theater, British and Indian “Chindits” employed long range penetration tactics, in which numerous separated columns simultaneously infiltrated the Japanese Army’s rear areas, in dispersed fashion. These units were large enough to inflict a heavy blow to the enemy, but small enough to avoid



decisive engagement if outnumbered. Supplied by air, the columns operated behind Japanese lines for extended periods of time, forming concentrations, in some instances, to establish strong bastions astride Japanese lines of communications.



**Area of Operations of CAP 2-7-4**

In Vietnam, U.S. Marines employed a rudimentary form of distributed operations, known as the Combined Action Program. This involved squad-sized Marine units deployed in villages, fighting alongside Vietnamese Popular Force militia. Combined Action units worked in coordination with conventional Marine forces that possessed greater mobility and combat power. In the Combined Action Program, separation and interdependent tactical actions were effective within an operational framework designed for area stability and counterinsurgency.

## **IMPLICATIONS FOR COMBAT DEVELOPMENT**

This concept will drive the entire range of combat development activities that deliver fully tested, combat ready, warfighting capabilities. Thorough experimentation and wargaming, supported by in-depth analysis, will guide the integration of solutions that address all pillars of combat development, all warfighting functions, and all elements of the Marine Air-Ground Task Force.

### **Focusing on the Marine: The Foundation of a Distributed Operations Capability**

One of the principal requirements for development of a distributed operations capability will be the further enhancement of training and professional education for small-unit leaders and individual Marines. Building on our existing ethos and our maneuver warfare philosophy, we must continue to elevate the already high competence of our most junior leaders, educating them to think and act at the tactical level of war, with an understanding of the application of commander's intent to achieve operational level effects. For example, we will provide infantry squad leaders a broad understanding of command and control systems, the intelligence cycle, fire support coordination, logistics, and other disciplines, in which extensive knowledge has heretofore been principally the domain of Marines far more senior. Further, we will provide junior leaders additional technical

skills that will enable them to perform combat tasks normally accomplished at higher levels of command. Marines at the infantry squad level, for example, will be trained to direct all forms of supporting arms, to provide terminal guidance for rotary wing and tiltrotor aircraft, to perform casualty evacuation, to maintain access to high-level communications networks, and other functions, without the aid of the specialists typically found at higher levels of command. A greater focus on cultural factors and language training will enhance small units in operating in complex environments.



The addition of extensive and complex new training standards and professional education requirements will demand concomitant adjustments in the personnel policy pillar of combat development. For example, increased training requirements will affect staffing levels in units as Marines attend additional or longer duration schools. Further, the time required to master new skills will potentially be considerable, calling for a review of personnel policies concerning tour length, promotion, and career patterning.

### **Distributed Operations and the Marine Air-Ground Task Force**

The Marine Air-Ground Task Force—the MAGTF—will remain our organizing principle in distributed operations, just as in all other forms of operations. As we explore the range of combat development initiatives necessary to transform this concept into warfighting capabilities, we will involve all elements of the MAGTF: Command, Aviation Combat, Ground Combat, and Combat Service Support. Enhancements will be applied to ensure that all elements of the MAGTF develop the range of capabilities required for distributed operations.

### **Enhancing Warfighting Capabilities Sets**

Units employing distributed operations will require capabilities that extend across the six warfighting functions.

**Maneuver.** Distributed operations will require both air mobility and organic vehicles for ground mobility. In order to exploit intelligence, individual units must move rapidly to maintain positional advantage relative to the enemy, or to enhance force protection



measures. Further, units will require the ability to re-aggregate, in order to temporarily mass for missions requiring larger physical concentrations of combat power. To facilitate rapid, coordinated action by dispersed units, new doctrine must be developed to articulate appropriate tactical control measures appropriate to this environment.

**Fires.** Distributed operations by networked forces will potentially generate significant amounts of actionable intelligence. Small units will exploit this intelligence by using both enhanced direct fire capabilities and supporting arms to neutralize or destroy much larger hostile forces. Additionally, increasing the amount of separation among units beyond mutually supporting range will require the use of supporting arms to supplement organic fires. For these reasons, small unit leaders will be trained in the employment of the full array of ground and aviation supporting arms, to include Joint fires, and will be provided the necessary equipment to perform target identification, location, and designation, as well as communication with fire support elements, and control of indirect fire weapons and aircraft. Further, this concept will require the development of new fire support coordination measures and procedures that will account for the unique battlefield geometry associated with distributed operations.

**Intelligence.** While the distributed operations concept is not oriented on reconnaissance, it nonetheless underscores the importance of individual Marines and small units in generating intelligence for their own use, as well as for their higher headquarters. Tactical intelligence will drive distributed operations, while the operations themselves will stimulate the collection and reporting of high-quality tactical intelligence. Of particular importance is the realization that the human dimension manifested in small units may be the only way to make positive identification of our adversary and gain an insight into his likely intent. Small units at the platoon level and below will require enhanced capabilities to collect, report, and exploit intelligence. These might include employment or direction of unmanned ground or air vehicles, or the ability to access command and control networks for the purpose of extracting specific intelligence pertinent to the unit's local situation.

**Command and Control.** A robust and resilient network will enable this operating approach. This network will include over-the-horizon, on-the-move, and beyond-line-of-sight communications assets that connect commanders to distributed units, and provide connectivity throughout the force, to include, where applicable, the sea-based elements of that force. The network will provide commanders the ability to coordinate the actions of widely separated small units. Further, it will enable separated small units to "self-organize" by carrying out mutually supporting tactical actions, in accordance with commander's intent. Most importantly, the command and control system will be designed to optimize and exploit the advantages of distributed decisionmaking by empowered small unit leaders, with "command and feedback" characterizing the distributed operations environment.

**Logistics.** Units operating in widely dispersed fashion will require unique combat logistics support, especially in supply, maintenance, and health services. The supply chain will be highly adaptive and flexible. Through "sense and respond" logistics, we



will share logistics information and allow for reconfiguration of the logistics system, when needed. At the same time, ground lines of communications will rarely be secure, in the traditional sense. Therefore, the development of logistics capabilities for distributed operations must take a two-pronged approach. First, we must invest small units with the capability to operate with only limited access to conventional combat logistics mechanisms. For example, man-portable water purification systems and the substitution of alternate power sources for batteries used in communications equipment and sensors can dramatically reduce two significant requirements for periodic resupply. Through the use of Autonomic Logistics, we will sense the development of maintenance problems, and will respond to them before they affect the mission. Marines will be trained to perform quick repairs to equipment by exchanging key components. The second prong of our approach must be to enable our combat logistics elements to perform their mission in a distributed operations environment. This will require a common perspective of the battlespace, shared by maneuver, logistics, and intelligence elements, as well as innovations in packaging and delivery.

**Force Protection.** In the case of protection against enemy action, an increased degree of force protection is inherent in distributed operations, in that dispersion itself is a protective measure. At the same time, however, dispersion beyond the range of mutual support with direct fire weapons is a potential source of increased vulnerability. We must develop capabilities to capitalize upon the advantages of dispersion, while mitigating its dangers. Such measures include enhanced, lightweight ballistic protective equipment, multi-spectral camouflage systems, and the capability to rapidly harden positions with minimal manpower.

## CONCLUSION

*Distributed Operations* will provide the leverage to move to the next level of accomplishment within the ongoing advance of innovation that has marked the history of the Marine Corps. The implementation of the *Distributed Operations* concept will provide Marine commanders an additive and complementary capability that will further strengthen the power inherent in the combined arms Marine Air-Ground Task Force. Through the employment of distributed operations techniques, Marines will confound the enemy's decision-making processes, while further increasing their own capacity for coordinated and decisive action. Once implemented, the concept will provide additional capabilities applicable to a wide range of adversaries and operational environments. The integration of new doctrine, force structure, training, equipment, personnel policies and leader development initiatives will afford our tactical and operational commanders a much-needed weapon in the brutal, yet increasingly sophisticated, Global War on Terrorism. Most importantly *Distributed Operations* will enhance the flexibility of our units and exploit the capacity of our Marines to more fully implement the principles of maneuver warfare.